Attorney Docket No.: 2003B049/2 Response dated: August 18, 2006

Reply to Office Action dated May 18, 2006

## Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in this application.

## Listing of Claims:

1. (Currently Amended) A laminate comprising:

an ionomer layer;

a backing layer comprising acrylonitrile-ethylene-styrene; acrylonitrile-styrene acrylate; an amorphous polyamide; butyl rubber; halogenated butyl rubber; a copolymer of isobutylene and an alkylstyrene; polyisobutylene; a chlorosulfonated polyethylene rubber; a copolyester; a cyclic olefin copolymer; a dynamically vulcanized alloy; a liquid crystal polymer; natural rubber; a general purpose rubber; nitrile rubber; polyacrylonitrile; a polyamide compound that is impact modified with an acid and/or an anhydride containing polymer or rubber; a polyamide elastomer; a polyarylate; a polyaryletherketone; polybenzimidazole; polybutylene terephthalate; polybutylene naphthalate; a polyester elastomer; polyethylene naphthalate; polyetherketone; polyethersulfone; polyimidesulfone; polymethacrylate-acrylonitrile-butadiene-styrene; polyphenylsulfone; polymethylmethacrylate; polystyrene; a high impact polystyrene; syndiotactic polystyrene; polystyrene maleic anhydride; polyethylene-vinyl alcohol; a sheet molding compound er a crosslinked, glass-reinforced, polyester/polystyrene composition; a bulk molding compound; a crosslinked polyurethane; a reinforced polyurethane; crosslinked dicyclopentadiene; a silicone rubber; a styrene block copolymer; a compression-molded article of woven, glass-fiber-reinforced polypropylene fibers; or mixtures thereof; and

a tie-layer disposed between the ionomer layer and the backing layer.

- 2. (Original) The laminate of claim 1, wherein the ionomer layer comprises a first ionomer layer and a second ionomer layer.
- 3. (Original) The laminate of claim 2, wherein one or both of the first ionomer layer and the second ionomer layer is pigmented, natural, or clear.
- 4. (Original) The laminate of claim 1, wherein the backing layer further comprises glass fibers, carbon fibers, polyaramide fibers, mineral fibers, mica, talc, metal whiskers, or mixtures thereof.
- 5. (Original) The laminate of claim 1, wherein the backing layer is multilayered.

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- 6. (Original) The laminate of claim 1, wherein the backing layer is a blend.
- 7. (Currently Amended) A composite comprising:

an ionomer layer;

a tie-layer; and

a substrate comprising acrylonitrile-ethylene-styrene; acrylonitrile-styrene-acrylate; an amorphous polyamide; butyl rubber; halogenated butyl rubber; a copolymer of isobutylene and an alkylstyrene; polyisobutylene; a chlorosulfonated polyethylene rubber; a copolyester; a cyclic olefin copolymer; a dynamically vulcanized alloy; a liquid crystal polymer; natural rubber; a general purpose rubber; nitrile rubber; polyacrylonitrile; a polyamide compound that is impact modified with an acid and/or an anhydride containing polymer or rubber; a polyamide elastomer; a polyarylate; a polyaryletherketone; polybenzimidazole; polybutylene terephthalate; polybutylene naphthalate; a polyester elastomer; polyethylene naphthalate; polyetherketone; polyethersulfone; polyimidesulfone; polymethacrylate-acrylonitrile-butadiene-styrene; polyphenylsulfone; polymethylmethacrylate; polyethylene-vinyl alcohol; a sheet molding compound or a crosslinked, glass-reinforced, polyester/polystyrene composition; a bulk molding compound; a crosslinked polyurethane; a reinforced polyurethane; crosslinked dicyclopentadiene; a silicone rubber; a styrene block copolymer; a compression-molded article of woven, glass-fiber-reinforced polypropylene fibers; or mixtures thereof; and

wherein the tie-layer is disposed between the ionomer layer and the substrate.

- 8. (Original) The composite of claim 7, wherein the ionomer layer comprises a first ionomer layer and a second ionomer layer.
- 9. (Original) The composite of claim 8, wherein one or both of the first ionomer layer and the second ionomer layer is pigmented, natural, or clear.
- 10. (Original) The composite of claim 7, wherein the composite further comprises a backing layer.
- 11. (Original) The composite of claim 10, wherein the backing layer further comprises glass fibers, carbon fibers, polyaramide fibers, mineral fibers, mica, talc, metal whiskers, or mixtures thereof.
- 12. (Original) The composite of claim 10, wherein the backing layer is a blend.

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- 13. (Original) The composite of claim 10, wherein the backing layer is multilayered.
- 14. (Original) The composite of claim 7, wherein the ionomer layer comprises a zinc-neutralized ionomer, a sodium-neutralized ionomer, or a mixture thereof.
- 15. (Original) The composite of claim 7, wherein the thickness of the composite is from 200  $\mu$ m to 6 mm.
- 16. (Original) The composite of claim 7, wherein the substrate further comprises glass fibers, carbon fibers, polyaramide fibers, mineral fibers, mica, talc, metal whiskers, or mixtures thereof.
- 17. (Original) The composite of claim 7, wherein the substrate is a foamed substrate.
- 18. (Currently Amended) A composite article comprising, in order:
  - an ionomer layer;
  - b) a tie-layer;
  - e) a backing layer; and
  - d) a substrate;

wherein at least one of the backing layer and substrate is selected from the group consisting of acrylonitrile-ethylene-styrene; acrylonitrile-styrene-acrylate; an amorphous polyamide; butyl rubber; halogenated butyl rubber; a copolymer of isobutylene and an alkylstyrene; polyisobutylene; a chlorosulfonated polyethylene rubber; a copolyester; a cyclic olefin copolymer; a dynamically vulcanized alloy; a liquid crystal polymer; natural rubber; a general purpose rubber; nitrile rubber; polyacrylonitrile; a polyamide compound that is impact modified with an acid and/or an anhydride containing polymer or rubber; a polyamide elastomer; a polyarylate; a polyaryletherketone; polybenzimidazole; polybutylene terephthalate; polybutylene naphthalate; a polyester elastomer; polyethylene naphthalate; polyetherketone; polyethersulfone; polyimidesulfone; polymethacrylateacrylonitrile-butadiene-styrene; polyphenylsulfone; polymethylmethacrylate; polystyrene; a high impact polystyrene; syndiotactic polystyrene; polystyrene maleic anhydride; polyethylene-vinyl alcohol; a sheet molding compound or a crosslinked, glass-reinforced, polyester/polystyrene composition; a bulk molding compound; a crosslinked polyurethane; a reinforced polyurethane; crosslinked dicyclopentadiene; a silicone rubber; a styrene block copolymer; a compressionmolded article of woven, glass-fiber-reinforced polypropylene fibers; blends thereof; and filled blends thereof.

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- 19. (Original) The composite article of claim 18, wherein the filled blend comprises glass fibers, carbon fibers, polyaramide fibers, mineral fibers, mica, talc, metal whiskers, or mixtures thereof.
- 20. (Original) The composite article of claim 18, wherein the ionomer layer comprises a first ionomer layer and a second ionomer layer.
- 21. (Original) The composite article of claim 20, wherein one or both of the first ionomer layer and the second ionomer layer is pigmented, natural, or clear.
- 22. (Original) The composite article of claim 18, wherein the backing layer comprises glass fibers, carbon fibers, polyaramide fibers, mineral fibers, mica, talc, metal whiskers, or mixtures thereof.
- 23. (Original) The composite article of claim 18, wherein the backing layer is a blend.
- 24. (Original) The composite article of claim 18, wherein the backing layer is multilayered.
- 25. (Original) The composite article of claim 18, wherein the ionomer layer comprises a zinc-neutralized ionomer, a sodium-neutralized ionomer, or a mixture thereof.
- 26. (Original) The composite article of claim 18, wherein the thickness of the composite article is from 200  $\mu m$  to 6 mm.
- 27. (Original) The composite article of claim 7, wherein the substrate is a foamed substrate.
- 28. (Currently Amended) A method of forming a composite article comprising:
  - (a) providing a laminate; and
  - (e) securing a substrate to the laminate;

wherein the substrate comprises acrylonitrile-ethylene-styrene; acrylonitrile-styreneacrylate; an amorphous polyamide; butyl rubber; halogenated butyl rubber; a copolymer of
isobutylene and an alkylstyrene; polyisobutylene; a chlorosulfonated polyethylene rubber; a
copolyester; a cyclic olefin copolymer; a dynamically vulcanized alloy; a liquid crystal polymer;
natural rubber; a general purpose rubber; nitrile rubber; polyacrylonitrile; a polyamide compound
that is impact modified with an acid and/or an anhydride containing polymer or rubber; a
polyamide elastomer; a polyarylate; a polyaryletherketone; polybenzimidazole; polybutylene
terephthalate; polybutylene naphthalate; a polyester elastomer; polyethylene naphthalate;
polyetherketone; polyethersulfone; polyimidesulfone; polymethacrylate-acrylonitrile-butadienestyrene; polyphenylsulfone; polymethylmethacrylate; polystyrene; a high impact polystyrene;

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syndiotactic polystyrene; polystyrene maleic anhydride; polyethylene-vinyl alcohol; a-sheet molding compound or a crosslinked, glass-reinforced, polyester/polystyrene composition; a bulk molding compound; a crosslinked polyurethane; a reinforced polyurethane; crosslinked dicyclopentadiene; a silicone rubber; a styrene block copolymer; a compression-molded article of woven, glass-fiber-reinforced polypropylene fibers; or mixtures thereof.

- 29. (Original) The method of claim 28, wherein the substrate further comprises glass fibers, carbon fibers, polyaramide fibers, mineral fibers, mica, talc, metal whiskers, or mixtures thereof.
- 30. (Original) The method of claim 28, wherein the laminate comprises an ionomer layer comprising a first ionomer layer and a second ionomer layer.
- 31. (Original) The method of claim 30, wherein one or both of the first ionomer layer and the second ionomer layer is pigmented, natural, or clear.
- 32. (Original) The method of claim 30, wherein the ionomer layer comprises a zinc-neutralized ionomer, a sodium-neutralized ionomer, or a mixture thereof.
- 33. (Original) The method of claim 28, wherein the composite article comprises a backing layer.
- 34. (Original) The method of claim 33, wherein the backing layer is multilayered.
- 35. (Original) The method of claim 33, wherein the backing layer is a blend.
- 36. (Original) The method of claim 28, wherein the thickness of the composite article is from 200 µm to 6 mm.
- 37. (Original) The method of claim 28, wherein the substrate is a foamed substrate.
- 38. (Original) The method of claim 28, wherein the laminate is a shaped laminate.
- 39. (Currently Amended) A composite article formed by the method comprising:
  - (a) coextruding an ionomer layer and a tie-layer to form a laminate;
  - (b) forming a shape from the laminate, resulting in a shaped laminate; and
  - (e) securing a substrate material to the shaped laminate;

wherein the substrate comprises acrylonitrile-ethylene-styrene; acrylonitrile-styrene acrylate; an amorphous polyamide; butyl rubber; halogenated butyl rubber; a copolymer of isobutylene and an alkylstyrene; polyisobutylene; a chlorosulfonated polyethylene rubber; a

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copolyester; a cyclic olefin copolymer; a dynamically vulcanized alloy; a liquid crystal polymer; natural rubber; a general purpose rubber; nitrile rubber; polyacrylonitrile; a polyamide compound that is impact modified with an acid and/or an anhydride containing polymer or rubber; a polyamide elastomer; a polyarylate; a polyaryletherketone; polybenzimidazole; polybutylene terephthalate; polybutylene naphthalate; a polyester elastomer; polyethylene naphthalate; polyetherketone; polyethersulfone; polyimidesulfone; polymethacrylate-acrylonitrile-butadiene-styrene; polyphenylsulfone; polymethylmethacrylate; polystyrene; a high impact polystyrene; syndiotactic polystyrene; polystyrene maleic anhydride; polyethylene-vinyl alcohol; a sheet molding compound or a crosslinked, glass-reinforced, polyester/polystyrene composition; a bulk molding compound; a crosslinked polyurethane; a reinforced polyurethane; crosslinked dicyclopentadiene; a silicone rubber; a styrene block copolymer; a compression-molded article of woven, glass-fiber-reinforced polypropylene fibers; or mixtures thereof.

- 40. (Original) The composite article of claim 39, wherein the step of forming comprises thermoforming.
- 41. (Original) The composite article of claim 39, wherein the ionomer layer comprises a first ionomer layer and a second ionomer layer.
- 42. (Original) The composite article of claim 41, wherein one or both of the first ionomer layer and the second ionomer layer is pigmented, natural, or clear.
- 43. (Original) The composite article of claim 39, wherein the laminate further comprises a backing layer.
- 44. (Original) The composite article of claim 43, wherein the backing layer is a blend.
- 45. (Original) The composite article of claim 43, wherein the backing layer is multilayered.
- 46. (Original) The composite article of claim 39, wherein the ionomer layer comprises a zinc-neutralized ionomer, a sodium-neutralized ionomer, or a mixture thereof.
- 47. (Original) The composite article of claim 39, wherein the thickness of the composite article is from 200 μm to 6 mm.

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- 48. (Original) The composite article of claim 39, wherein the substrate further comprises glass fibers, carbon fibers, polyaramide fibers, mineral fibers, mica, talc, metal whiskers, or mixtures thereof.
- 49. (Original) The composite article of claim 39, wherein the substrate is a foamed substrate.
- 50. (Currently Amended) A vehicle comprising a composite comprising:

an ionomer layer;

a tie-layer; and

a substrate comprising acrylonitrile-ethylene-styrene; acrylonitrile styrene-acrylate; an amorphous polyamide; butyl rubber; halogenated butyl rubber; a copolymer of isobutylene and an alkylstyrene; polyisobutylene; a chlorosulfonated polyethylene rubber; a copolyester; a cyclic olefin copolymer; a dynamically vulcanized alloy; a liquid crystal polymer; natural rubber; a general purpose rubber; nitrile rubber; polyacrylonitrile; a polyamide compound that is impact modified with an acid and/or an anhydride containing polymer or rubber; a polyamide elastomer; a polyarylate; a polyaryletherketone; polybenzimidazole; polybutylene terephthalate; polybutylene naphthalate; a polyester elastomer; polyethylene naphthalate; polyetherketone; polyethersulfone; polyimidesulfone; polymethacrylate-acrylonitrile-butadiene-styrene; polyphenylsulfone; polymethylmethacrylate; polyethylene-vinyl alcohol; a sheet molding compound or a crosslinked, glass-reinforced, polyester/polystyrene composition; a bulk molding compound; a crosslinked polyurethane; a reinforced polyurethane; crosslinked dicyclopentadiene; a silicone rubber; a styrene block copolymer; a compression-molded article of woven, glass-fiber-reinforced polypropylene fibers; or mixtures thereof; and

wherein the tie-layer is disposed between the ionomer layer and the substrate.

- 51. (Currently Amended) An appliance comprising a composite comprising:
  - an ionomer layer;
  - a tie-layer; and
- a substrate comprising acrylonitrile-ethylene-styrene; acrylonitrile-styrene-acrylate; an amorphous polyamide; butyl rubber; halogenated butyl rubber; a copolymer of isobutylene and an alkylstyrene; polyisobutylene; a chlorosulfonated polyethylene rubber; a copolyester; a cyclic

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olefin copolymer; a dynamically vulcanized alloy; a liquid crystal polymer; natural rubber; a general purpose rubber; nitrile rubber; polyacrylonitrile; a polyamide compound that is impact modified with an acid and/or an anhydride containing polymer or rubber; a polyamide elastomer; a polyarylate; a polyaryletherketone; polybenzimidazole; polybutylene terephthalate; polybutylene naphthalate; a polyester elastomer; polyethylene naphthalate; polyetherketone; polyethersulfone; polyimidesulfone; polymethacrylate-acrylonitrile-butadiene-styrene; polyphenylsulfone; polymethylmethacrylate; polystyrene; a high impact polystyrene; syndiotactic polystyrene; polystyrene maleic anhydride; polyethylene-vinyl alcohol; a sheet molding compound or a crosslinked, glass-reinforced, polyester/polystyrene composition; a bulk molding compound; a crosslinked polyurethane; a reinforced polyurethane; crosslinked dicyclopentadiene; a silicone rubber; a styrene block copolymer; a compression-molded article of woven, glass-fiber-reinforced polypropylene fibers; or mixtures thereof; and

wherein the tie-layer is disposed between the ionomer layer and the substrate.

52. (Currently Amended) An automotive part comprising a composite comprising:

an ionomer layer;

a tie-layer; and

a substrate comprising acrylonitrile-ethylene-styrene; acrylonitrile-styrene-acrylate; an amorphous polyamide; butyl rubber; halogenated butyl rubber; a copolymer of isobutylene and an alkylstyrene; polyisobutylene; a chlorosulfonated polyethylene rubber; a copolyester; a cyclic olefin copolymer; a dynamically vulcanized alloy; a liquid crystal polymer; natural rubber; a general purpose rubber; nitrile rubber; polyacrylonitrile; a polyamide compound that is impact modified with an acid and/or an anhydride containing polymer or rubber; a polyamide elastomer; a polyarylate; a polyaryletherketone; polybenzimidazole; polybutylene terephthalate; polybutylene naphthalate; a polyester elastomer; polyethylene naphthalate; polyetherketone; polyethersulfone; polyimidesulfone; polymethacrylate-acrylonitrile-butadiene-styrene; polyphenylsulfone; polymethylmethacrylate; polyethylene-vinyl alcohol; a sheet molding compound or a crosslinked, glass-reinforced, polyester/polystyrene composition; a bulk molding compound; a crosslinked polyurethane; a reinforced polyurethane; crosslinked dicyclopentadiene; a silicone

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rubber; a styrene block copolymer; a compression-molded article of woven, glass-fiber-reinforced polypropylene fibers; or mixtures thereof; and

wherein the tie-layer is disposed between the ionomer layer and the substrate.

53. (Currently Amended) A boat hull comprising a composite comprising:

an ionomer layer;

a tie-layer; and

a substrate comprising acrylonitrile-ethylene-styrene; acrylonitrile-styrene-acrylate; an amorphous polyamide; butyl rubber; halogenated butyl rubber; a copolymer of isobutylene and an alkylstyrene; polyisobutylene; a chlorosulfonated polyethylene rubber; a copolyester; a cyclic olefin copolymer; a dynamically vulcanized alloy; a liquid crystal polymer; natural rubber; a general purpose rubber; nitrile rubber; polyacrylonitrile; a polyamide compound that is impact modified with an acid and/or an anhydride containing polymer or rubber; a polyamide elastomer; a polyarylate; a polyaryletherketone; polybenzimidazole; polybutylene terephthalate; polybutylene naphthalate; a polyester elastomer; polyethylene naphthalate; polyetherketone; polyethersulfone; polyimidesulfone; polymethacrylate-acrylonitrile-butadiene-styrene; polyphenylsulfone; polymethylmethacrylate; polyethylene-vinyl alcohol; a sheet molding compound or a crosslinked, glass-reinforced, polyester/polystyrene composition; a bulk molding compound; a crosslinked polyurethane; a reinforced polyurethane; crosslinked dicyclopentadiene; a silicone rubber; a styrene block copolymer; a compression-molded article of woven, glass-fiber-reinforced polypropylene fibers; or mixtures thereof; and

wherein the tie-layer is disposed between the ionomer layer and the substrate.